

PATENT APPLICATION

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re the Application of:

Pirjo PASANEN et al.

Group Art Unit: Unassigned

Application No.: New Application

Examiner: Unassigned

Filed: January 15, 2004

Attorney Dkt. No.: 59643.00360

For: MULTI-USER MULTICARRIER ALLOCATION IN A COMMUNICATION SYSTEM

INFORMATION DISCLOSURE STATEMENT

Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

January 15, 2004

Sir:

Pursuant to 37 CFR §1.56, the attention of the Patent and Trademark Office is hereby directed to the information item(s) listed on the attached PTO-1449. Unless otherwise indicated herein, one copy of each item(s) is attached. It is respectfully requested that the information be expressly considered during the prosecution of this application, and that the item(s) be made of record therein and appear among the "References Cited" on any patent to issue therefrom.

- ☒ 1. This Information Disclosure Statement is being filed (a) within three months of the U.S. filing date or the date of filing a CPA, OR (b) before the mailing date of a first Office Action on the merits in the present application, or (c) accompanies a Request for Continued Examination. No certification or fee is required.
- ☐ 2. This Information Disclosure Statement is being filed more than three months after the U.S. filing date AND after the mailing date of the first Office Action on the merits, but before the mailing date of a Final Rejection or Notice of Allowance.
- ☐ a. I hereby certify that each item of information contained in this

Information Disclosure Statement was cited in a communication from a foreign patent office in a counterpart foreign application not more than three months prior to the filing of this Information Disclosure Statement. 37 CFR §1.97(e)(1).

☐ b. I hereby certify that no item of information in this Information Disclosure Statement was cited in a communication from a foreign patent office in a counterpart foreign application or, to my knowledge after making reasonable inquiry, was known to any individual designated in 37 CFR §1.56(c) more than three months prior to the filing of this Information Disclosure Statement. 37 CFR §1.97(e)(2).

☐ c. A check in the amount of \$180.00 in payment of the fee under 37 CFR §1.17(p). Please charge any fee deficiency or credit any overpayment to Counsel's Deposit Account No. 50-2222 as needed to ensure consideration of the disclosed information.

☐ 3. This Information Disclosure Statement is being filed more than three months after the U.S. filing date and after the mailing date of a Final Rejection or Notice of Allowance, but before payment of the Issue Fee. Applicant(s) hereby petition(s) that the Information Disclosure Statement be considered. Attached is our check in the amount of \$130.00 in payment of the petition fee under 37 CFR §1.17(i)(1). Please charge any fee deficiency or credit any overpayment to Counsel's Deposit Account No. 50-2222 as needed to ensure consideration of the disclosed information.

☐ a. I hereby certify that each item of information contained in this Information Disclosure Statement was first cited in any communication from a foreign patent office in a counterpart foreign application not more than three months prior to the filing of this Information Disclosure Statement. 37 CFR §1.97(e)(1).

☐ b. I hereby certify that no item of information in this Information Disclosure Statement was cited in any communication from a foreign patent office in a counterpart foreign application and, to my knowledge after making reasonable inquiry, was known to any individual designated in 37 CFR §1.56(c) more than three months prior to the filing of this Information Disclosure Statement. 37 CFR §1.97(e)(2).

In the event that there are any fees due with respect to the filing of this paper, please charge Counsel's Deposit Account No. 50-2222.

Respectfully submitted,



Douglas H. Goldhush
Registration No. 33,125

Customer Number 32294
SQUIRE, SANDERS & DEMPSEY LLP
14TH Floor
8000 Towers Crescent Drive
Tysons Corner, Virginia 22182-2700
Telephone: 703-720-7800
Fax: 703-720-7802

DHG:cct

Enclosures: PTO-1449 Form; 4 References

FORM PTO-1449 U.S. DEPARTMENT OF COMMERCE PATENT AND TRADEMARK OFFICE LIST OF REFERENCES CITED BY APPLICANT <i>(Use several sheets if necessary)</i>	ATTY. DOCKET NO.	SERIAL NO.
	59643.00360	New Application
	APPLICANT Pirjo PASANEN et al.	
	FILING DATE	GROUP
	January 15, 2004	Unassigned

U.S. PATENT DOCUMENTS

EXAMINER INITIAL		DOCUMENT NO.	DATE	NAME	CLASS	SUB- CLASS	FILING DATE
	AA	6,400,699 B1	06/04/02	Airy et al.			
	AB						
	AC						
	AD						
	AE						
	AF						

FOREIGN PATENT DOCUMENTS

		DOCUMENT NO.	DATE	COUNTRY	CLASS	SUB- CLASS	<u>TRANSLATION</u> YES NO PART.		
	AG								
	AH								
	AI								
	AJ								
	AK								

OTHER REFERENCES *(Including Author, Title, Date, Pertinent Pages, Etc.)*

	AL	"Adaptive Antennas at the Mobile and Base Stations in an OFDM/TDMA Systems," K-K Wong, R. S-K Cheng, K. Ben Letaief, R.D. Murch, Department of Electrical & Electronic Engineering, The Hong Kong University of Science & Technology
	AM	"Adaptive Modulation Techniques for Duplex OFDM Transmission," IEEE Transactions on Vehicular Technology, vol. 49, No. 5, September 2000
	AN	"Multiuser Subcarrier Allocation for OFDM Transmission Using Adaptive Modulation," Cheong Yui Wong, Roger S. Cheng, Khaled Ben Letaief, Ross D. Murch, Department of Electrical and Electronic Engineering, The Hong Kong University of Science & Technology
EXAMINER		DATE CONSIDERED

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.